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(FILE 'USPAT' ENTERED AT 09:32:15 ON 30 MAR 1998)
L1 24156 S SEMICONDUCTOR(P)DOP?
L2 21156 S PULS?(P)LASER
L3 4941 S PULS?(P)ION
L4 213 S L1(P)L2
L5 97 S L1(P)L3

=> d cit l4 1-

1. 5,725,914, Mar. 10, 1998, Process and apparatus for producing a functional structure of a semiconductor component; Hans Opower, 427/592; 204/192.1; 427/572, 586; 438/792 [IMAGE AVAILABLE]

2. 5,723,864, Mar. 3, 1998, Linear cavity laser system for ultra-sensitive gas detection via intracavity laser spectroscopy (ILS); George H. Atkinson, et al., 250/339.13, 343; 356/328; 372/41 [IMAGE AVAILABLE]

3. 5,706,094, Jan. 6, 1998, Ultrafast optical technique for the characterization of altered materials; Humphrey J. Maris, 356/432, 445 [IMAGE AVAILABLE]

4. 5,698,397, Dec. 16, 1997, Up-converting reporters for biological and other assays using laser excitation techniques; David A. Zarling, et al., 435/6; 216/25; 250/581; 313/467; 435/5, 7.1; 536/24.3 [IMAGE AVAILABLE]

5. 5,696,782, Dec. 9, 1997, High power fiber chirped pulse amplification systems based on cladding pumped rare-earth doped fibers; Donald J. Harter, et al., 372/25, 6, 70, 98, 102, 106, 703 [IMAGE AVAILABLE]

6. 5,696,011, Dec. 9, 1997, Method for forming an insulated gate field effect transistor; Shunpei Yamazaki, et al., 1/1 [IMAGE AVAILABLE]

✓7. 5,688,715, Nov. 18, 1997, Excimer laser dopant activation of backside illuminated CCD's; Douglas A. Sexton, et al., 1/1 [IMAGE AVAILABLE]

8. 5,674,698, Oct. 7, 1997, Up-converting reporters for biological and other assays using laser excitation techniques; David A. Zarling, et al., 435/7.92; 422/52, 56, 82.05; 435/7.1, 7.95; 436/169, 172 [IMAGE AVAILABLE]

9. 5,667,300, Sep. 16, 1997, Non-contact photothermal method for measuring thermal diffusivity and electronic defect properties of solids; Andreas Mandelis, et al., 374/43, 121, 128 [IMAGE AVAILABLE]

10. 5,654,904, Aug. 5, 1997, Control and 3-dimensional simulation model of temperature variations in a rapid thermal processing machine; Randhir P. S. Thakur, 364/557; 204/298.03, 298.09; 364/489; 438/5, 795 [IMAGE AVAILABLE]

11. 5,643,801, Jul. 1, 1997, Laser processing method and alignment; Hiroaki Ishihara, et al., 250/492.1; 117/8, 904; 148/DIG.90; 250/491.1, 492.2; 438/795 [IMAGE AVAILABLE]

12. 5,628,196, May 13, 1997, Cryogenic cooling apparatus employing heat

sink and diffuser pla[redacted] for cooling small objects; Roge[redacted] C. Farmer, 62/51.1, 259.2; 372/3[redacted] IMAGE AVAILABLE]

13. 5,627,848, May 6, 1997, Apparatus for producing femtosecond and picosecond pulses from modelocked fiber lasers cladding pumped with broad area diode laser arrays; Martin E. Fermann, et al., 372/18, 6, 11, 12, 25, 27, 94, 98, 102, 105 [IMAGE AVAILABLE]

14. 5,618,741, Apr. 8, 1997, Manufacture of electronic devices having thin-film transistors; Nigel D. Young, et al., 438/151, 163, 535, 555 [IMAGE AVAILABLE]

15. H 1,637, Mar. 4, 1997, Laser-assisted fabrication of bipolar transistors in silicon-on-sapphire (SOS); Bruce W. Offord, et al., 438/311; 148/DIG.11, DIG.92, DIG.150; 438/799 [IMAGE AVAILABLE]

16. 5,606,570, Feb. 25, 1997, High power antiguided semiconductor laser with interelement loss; Dan Botez, et al., 372/50, 18 [IMAGE AVAILABLE]

17. 5,594,748, Jan. 14, 1997, Method and apparatus for predicting semiconductor laser failure; Salim N. Jabr, 372/38, 6 [IMAGE AVAILABLE]

18. 5,592,282, Jan. 7, 1997, Suppression of stimulated scattering in optical time domain reflectometry; Arthur H. Hartog, 356/44; 250/227.18; 356/73.1, 301 [IMAGE AVAILABLE]

19. 5,590,141, Dec. 31, 1996, Method and apparatus for generating and employing a high density of excited ions in a lasant; Brian Baird, et al., 372/10, 25, 70, 75 [IMAGE AVAILABLE]

20. 5,583,369, Dec. 10, 1996, Semiconductor device and method for forming the same; Shunpei Yamazaki, et al., 257/635, 66, 352, 353 [IMAGE AVAILABLE]

21. 5,581,570, Dec. 3, 1996, Semiconductor laser device; Yasuaki Yoshida, et al., 372/46, 45 [IMAGE AVAILABLE]

22. 5,577,057, Nov. 19, 1996, Modelocked lasers; Steven J. Frisken, 372/18, 6, 25, 94 [IMAGE AVAILABLE]

23. 5,576,556, Nov. 19, 1996, Thin film semiconductor device with gate metal oxide and sidewall spacer; Yasuhiko Takemura, et al., 257/69, 66, 72, 344, 391, 408 [IMAGE AVAILABLE]

24. 5,572,046, Nov. 5, 1996, Semiconductor device having at least two thin film transistors; Yasuhiko Takemura, 257/66, 59, 72, 347, 350, 410; 349/42 [IMAGE AVAILABLE]

25. 5,569,624, Oct. 29, 1996, Method for shallow junction formation; Kurt H. Weiner, 438/285; 148/DIG.90; 438/301, 308, 559, 563, 923 [IMAGE AVAILABLE]

26. 5,569,615, Oct. 29, 1996, Method for forming a flash memory by forming shallow and deep regions adjacent the gate; Shunpei Yamazaki, et al., 438/257, 307, 535 [IMAGE AVAILABLE]

27. 5,569,398, Oct. 29, 1996, Laser system and method for selectively trimming films; Yunlong Sun, et al., 219/121.68, 121.69; 438/799, 940 [IMAGE AVAILABLE]

28. 5,567,646, Oct. 22, 1996, Method of making a stripe-geometry II/VI semiconductor gain-guided injection laser structure using ion implantation; Kevin W. Haberern, 438/45 [IMAGE AVAILABLE]

29. 5,561,612, Oct. 1, 1996, Control and 3-dimensional simulation model

of temperature variations in a rapid thermal processing machine; Randhir P. S. Thakur, 364/557 374/121 [IMAGE AVAILABLE]

30. 5,561,088, Oct. 1, 1996, Heating method and manufacturing method for semiconductor device; Toshiyuki Sameshima, 438/166; 117/7, 108; 148/DIG.3, DIG.6; 432/14; 438/486, 770, 795 [IMAGE AVAILABLE]

31. 5,561,081, Oct. 1, 1996, Method of forming a semiconductor device by activating regions with a laser light; Akira Takenouchi, et al., 438/166; 117/904; 438/479, 487, 799 [IMAGE AVAILABLE]

32. 5,559,058, Sep. 24, 1996, Method for producing native oxides on compound semiconductors; Peter S. Zory, Jr., et al., 438/10; 205/157; 438/34, 42, 469, 702, 767, 913 [IMAGE AVAILABLE]

33. 5,555,127, Sep. 10, 1996, Planar hybrid optical amplifier; Hatem Abdelkader, et al., 359/341; 385/14 [IMAGE AVAILABLE]

34. 5,548,603, Aug. 20, 1996, Method for the generation of ultra-short optical pulses; Riccardo Calvani, et al., 372/25, 20, 34 [IMAGE AVAILABLE]

35. 5,548,433, Aug. 20, 1996, Optical clock recovery; Kevin Smith, 359/158, 179, 188, 341, 349; 372/18, 26, 28, 32 [IMAGE AVAILABLE]

36. 5,541,138, Jul. 30, 1996, Laser processing method, and method for forming insulated gate semiconductor device; Shunpei Yamazaki, et al., 438/535, 550, 565 [IMAGE AVAILABLE]

37. 5,538,564, Jul. 23, 1996, Three dimensional amorphous silicon/microcrystalline silicon solar cells; James L. Kaschmitter, 136/255, 256, 258; 257/458, 465; 438/96, 97, 535 [IMAGE AVAILABLE]

38. 5,530,585, Jun. 25, 1996, Optical soliton transmission system; John J. E. Reid, et al., 359/344, 185, 341; 372/33 [IMAGE AVAILABLE]

39. 5,528,611, Jun. 18, 1996, Repetitively Q-switched laser pumped by laer diodes and Q-switched with an intracavity variable speed moving aperture; Richard Scheps, 372/14, 9, 103 [IMAGE AVAILABLE]

40. 5,528,389, Jun. 18, 1996, Optical holographic system for parallel to serial and serial to parallel conversion of optical data; Martin C. Nuss, 359/4, 29, 559; 382/280 [IMAGE AVAILABLE]

41. 5,521,751, May 28, 1996, Noise measurement for optical amplifier and a system therefor; Kazuo Aida, et al., 359/337, 110, 177, 341 [IMAGE AVAILABLE]

42. 5,504,617, Apr. 2, 1996, Optical time domain reflectometry; David M. Spirit, 359/341, 110 [IMAGE AVAILABLE]

43. 5,499,599, Mar. 19, 1996, Method for continuous control of composition and doping of pulsed laser deposited films by pressure control; Douglas H. Lowndes, et al., 117/105, 108; 204/192.13, 298.03; 427/8, 586, 596; 438/478, 925 [IMAGE AVAILABLE]

44. 5,498,867, Mar. 12, 1996, Wavelength-division multiplex digital optical position sensor; Takeo Senuma, et al., 250/231.18, 226, 227.23; 356/395; 359/115 [IMAGE AVAILABLE]

45. 5,496,766, Mar. 5, 1996, Method for producing a luminous element of III-group nitride; Hiroshi Amano, et al., 438/29; 117/92, 952; 438/46, 796 [IMAGE AVAILABLE]

46. 5,476,691, Dec. 19, 1995, Surface treatment of magnetic recording

heads; Kyriakos Komvo[illegible]los, et al., 427/527, 127, 130, 131, 132, 249, 250, 255.7, 294, 404, [illegible]1, 535, 576, 577, 578 [IMAGE A[illegible]LABLE]

47. 5,473,624, Dec. 5, 1995, Laser system and method for selectively severing links; Yunlong Sun, 372/69, 11, 25 [IMAGE AVAILABLE]

48. 5,456,763, Oct. 10, 1995, Solar cells utilizing pulsed-energy crystallized microcrystalline/polycrystalline silicon; James L. Kaschmitter, et al., 136/258; 257/49, 75; 438/97, 487 [IMAGE AVAILABLE]

49. 5,450,427, Sep. 12, 1995, Technique for the generation of optical pulses in modelocked lasers by dispersive control of the oscillation pulse width; Martin E. Fermann, et al., 378/18; 372/6, 11, 12, 13, 20, 34, 102 [IMAGE AVAILABLE]

50. 5,448,579, Sep. 5, 1995, Polarization independent picosecond fiber laser; Kok W. Chang, et al., 372/6, 18, 27 [IMAGE AVAILABLE]

51. 5,436,925, Jul. 25, 1995, Colliding pulse mode-locked fiber ring laser using a semiconductor saturable absorber; Hong Lin, et al., 372/92, 6, 11, 18, 25, 27, 94, 98 [IMAGE AVAILABLE]

52. 5,434,879, Jul. 18, 1995, Gain-switched semiconductor light pulse source, and a soliton transmission system; Elisabeth Brun, et al., 372/50; 359/188; 372/26 [IMAGE AVAILABLE]

53. 5,434,878, Jul. 18, 1995, Optical gain medium having doped nanocrystals of semiconductors and also optical scatterers; Nabil R. Lawandy, 372/43, 22, 25, 41, 46 [IMAGE AVAILABLE]

54. 5,428,226, Jun. 27, 1995, Relativistic semiconductor plasma wave frequency up-converter with energized portion; Jeff C. Adams, 257/80, 82, 98, 432; 332/135; 359/248; 385/18 [IMAGE AVAILABLE]

55. 5,426,686, Jun. 20, 1995, Compact high-intensity pulsed x-ray source, particularly for lithography; Peter M. Rentzepis, et al., 378/34; 101/467; 378/136; 430/966, 967 [IMAGE AVAILABLE]

56. 5,425,860, Jun. 20, 1995, Pulsed energy synthesis and doping of silicon carbide; Joel B. Truher, et al., 204/192.23; 136/258, 261; 204/192.15, 192.16, 192.17, 192.25, 192.26 [IMAGE AVAILABLE]

57. 5,423,798, Jun. 13, 1995, Ophthalmic surgical laser apparatus; Lowell M. Crow, 606/4, 3, 10, 15 [IMAGE AVAILABLE]

58. H 1,443, Jun. 6, 1995, Optically activated multi-frequency high power RF generation utilizing a wafer-scale Si-GaAs substrate; Anderson H. Kim, et al., 252/582; 257/86; 343/792.5 [IMAGE AVAILABLE]

59. 5,422,897, Jun. 6, 1995, Two-stage mono-mode optical fibre laser; Richard Wyatt, et al., 372/6, 102 [IMAGE AVAILABLE]

60. 5,406,420, Apr. 11, 1995, Optical device; Yoshinobu Maeda, 359/885; 250/227.23; 359/578, 583, 589, 888 [IMAGE AVAILABLE]

61. 5,404,371, Apr. 4, 1995, Semiconductor pulsation laser; Yoshihiro Kokubo, 372/45 [IMAGE AVAILABLE]

62. 5,403,762, Apr. 4, 1995, Method of fabricating a TFT; Yasuhiko Takemura, 438/164; 148/DIG.91; 438/166 [IMAGE AVAILABLE]

63. 5,401,666, Mar. 28, 1995, Method for selective annealing of a semiconductor device; Hironori Tsukamoto, 438/305, 308 [IMAGE AVAILABLE]

64. 5,400,350, Mar. 21, 1995, Method and apparatus for generating high

energy ultrashort pul[illegible]s; Almantas Galvanauskas, 372/2[illegible] 19, 25, 96, 97, 99, 102 [IMAGE AVAIL[illegible]E]

65. 5,399,506, Mar. 21, 1995, Semiconductor fabricating process; Hironori Tsukamoto, 438/301, 308, 369, 378, 530 [IMAGE AVAILABLE]

66. 5,389,779, Feb. 14, 1995, Method and apparatus for near-field, scanning, optical microscopy by reflective, optical feedback; Robert E. Betzig, et al., 250/216, 306 [IMAGE AVAILABLE]

67. 5,386,798, Feb. 7, 1995, Method for continuous control of composition and doping of pulsed laser deposited films; Douglas H. Lowndes, et al., 117/50, 84, 88, 92, 103, 104; 148/DIG.64 [IMAGE AVAILABLE]

68. 5,386,429, Jan. 31, 1995, Low operating current and low noise semiconductor laser device for optical disk memories; Hiroki Naito, et al., 372/46, 45 [IMAGE AVAILABLE]

69. 5,371,756, Dec. 6, 1994, Semiconductor blue-green laser diodes; Hiroaki Fujii, 372/45; 257/13, 22, 78, 103, 200; 372/46 [IMAGE AVAILABLE]

70. 5,359,612, Oct. 25, 1994, High repetition rate, mode locked, figure eight laser with extracavity feedback; Michael L. Dennis, et al., 372/18, 6, 21, 30, 94; 385/11, 24 [IMAGE AVAILABLE]

71. 5,349,597, Sep. 20, 1994, Semiconductor laser device and production method therefor; Hitoshi Mizuochi, 372/44, 47; 438/40, 47 [IMAGE AVAILABLE]

72. 5,346,850, Sep. 13, 1994, Crystallization and doping of amorphous silicon on low temperature plastic; James L. Kaschmitter, et al., 438/487, 96, 535 [IMAGE AVAILABLE]

73. 5,341,001, Aug. 23, 1994, Sulfide-selenide manganese-zinc mixed crystal photo semiconductor and laser diode; Shigeo Hayashi, et al., 257/94, 96, 97, 184, 200; 372/43, 44, 45 [IMAGE AVAILABLE]

74. 5,338,393, Aug. 16, 1994, Method for the local removal of UV-transparent insulation layers on a semiconductor substrate; Christian Burmer, 438/676, 695, 708 [IMAGE AVAILABLE]

75. 5,336,636, Aug. 9, 1994, Method for contacting conductive structures in VLSI circuits; Christian Burmer, 438/940 [IMAGE AVAILABLE]

76. 5,323,024, Jun. 21, 1994, Relativistic semiconductor plasma wave frequency up-converter; Jeff C. Adams, 257/80, 82, 98, 432; 332/135; 359/248; 385/18 [IMAGE AVAILABLE]

77. 5,323,013, Jun. 21, 1994, Method of rapid sample handling for laser processing; Eugene P. Kelly, et al., 250/522.1; 422/186.3 [IMAGE AVAILABLE]

✓✓ 78. 5,316,969, May 31, 1994, Method of shallow junction formation in semiconductor devices using gas immersion laser doping; Emi Ishida, et al., 438/535; 148/DIG.129 [IMAGE AVAILABLE]

79. 5,300,789, Apr. 5, 1994, Article comprising means for modulating the optical transparency of a semiconductor body, and method of operating the article; Vera B. Gorfinkel, et al., 257/21, 15, 184, 459; 359/248 [IMAGE AVAILABLE]

80. 5,294,289, Mar. 15, 1994, Detection of interfaces with atomic resolution during material processing by optical second harmonic generation; Tony F. Heinz, et al., 216/60; 118/712; 156/345; 216/67, 79;

427/10 [IMAGE AVAILABLE]

81. 5,285,467, Feb. 8, 1994, Compact, efficient, scalable neodymium laser co-doped with activator ions and pumped by visible laser diodes; Richard Scheps, 372/69, 19, 41, 68, 75, 92 [IMAGE AVAILABLE]

82. 5,285,460, Feb. 8, 1994, Total-solidification type tunable pulse laser; Yoshifumi Ueda, et al., 372/20, 10, 21, 22, 41 [IMAGE AVAILABLE]

83. 5,283,801, Feb. 1, 1994, External resonant ring cavity for generating high-peak-power laser pulses; George S. Mecherle, 372/94, 27, 30, 71, 93, 107 [IMAGE AVAILABLE]

84. 5,280,492, Jan. 18, 1994, Yb:FAP and related materials, laser gain medium comprising same, and laser systems using same; William F. Krupke, et al., 372/41 [IMAGE AVAILABLE]

85. 5,280,168, Jan. 18, 1994, Tapered radial transmission line for an optically activated hybrid pulser; Anderson H. Kim, et al., 250/214.1, 551 [IMAGE AVAILABLE]

86. 5,272,716, Dec. 21, 1993, Hand held laser apparatus; Barbara A. Soltz, et al., 372/109; 219/121.6; 372/6, 29, 38 [IMAGE AVAILABLE]

87. 5,272,361, Dec. 21, 1993, Field effect semiconductor device with immunity to hot carrier effects; Shunpei Yamazaki, 257/66, 192, 347, 410, 411 [IMAGE AVAILABLE]

88. 5,262,657, Nov. 16, 1993, Optically activated wafer-scale pulser with AlGaAs epitaxial layer; Anderson H. Kim, et al., 257/86; 250/214.1; 257/79, 94, 98 [IMAGE AVAILABLE]

89. 5,254,237, Oct. 19, 1993, Plasma arc apparatus for producing diamond semiconductor devices; Alvin A. Snaper, et al., 204/298.41, 192.38; 427/580 [IMAGE AVAILABLE]

90. 5,231,297, Jul. 27, 1993, Thin film transistor; Shoichiro Nakayama, et al., 257/77, 65, 66, 192 [IMAGE AVAILABLE]

91. 5,229,322, Jul. 20, 1993, Method of making low resistance substrate or buried layer contact; Shao-Fu S. Chu, et al., 117/53, 904; 148/DIG.90; 438/799 [IMAGE AVAILABLE]

92. 5,225,371, Jul. 6, 1993, Laser formation of graded junction devices; Douglas A. Sexton, et al., 117/43, 904; 438/312, 936 [IMAGE AVAILABLE]

93. 5,218,609, Jun. 8, 1993, Solid laser oscillator; Seiji Oda, 372/20, 10, 22 [IMAGE AVAILABLE]

94. 5,217,306, Jun. 8, 1993, Temperature distribution analyzer using optical fiber; Fumio Wada, 374/161; 356/44, 301; 374/131, 137 [IMAGE AVAILABLE]

95. 5,215,800, Jun. 1, 1993, Erasable optical recording medium and method for writing, reading and/or erasing thereof; Takahiro Daido, et al., 428/64.8; 346/135.1; 369/288; 428/411.1, 457, 913; 430/270.14, 270.15, 945 [IMAGE AVAILABLE]

96. 5,202,278, Apr. 13, 1993, Method of forming a capacitor in semiconductor wafer processing; Viju K. Mathews, et al., 438/398, 964 [IMAGE AVAILABLE]

97. 5,200,972, Apr. 6, 1993, ND laser with co-doped ion(s) pumped by visible laser diodes; Richard Scheps, 372/69, 41, 68, 71, 75 [IMAGE AVAILABLE]

98. 5,198,881, Mar. 30 1993, Barrier layer device processing; Jammy C. Huang, et al., 257/219, 222, 436, 440, 447, 460, 463, 464, 655 [IMAGE AVAILABLE]

99. 5,185,586, Feb. 9, 1993, Method and apparatus for digital synthesis of microwaves; Oved S. F. Zucker, 331/96; 307/106; 331/172, 173 [IMAGE AVAILABLE]

100. 5,180,690, Jan. 19, 1993, Method of forming a layer of doped crystalline semiconductor alloy material; Wolodymyr Czubatyj, et al., 438/485; 136/258; 148/DIG.1, DIG.122; 204/192.25; 427/524; 438/483, 487 [IMAGE AVAILABLE]

101. 5,177,486, Jan. 5, 1993, Optically activated hybrid pulser with patterned radiating element; Anderson H. Kim, et al., 342/21; 250/214.1; 307/106; 342/13, 175, 202 [IMAGE AVAILABLE]

102. 5,166,818, Nov. 24, 1992, Optical pulse-shaping device and method, and optical communications station and method; Eugene W. Chase, et al., 359/170, 572, 615, 868; 372/102, 700 [IMAGE AVAILABLE]

103. 5,165,077, Nov. 17, 1992, Optical drop-and-insert apparatus; Hiroyuki Rokugawa, et al., 359/138, 160 [IMAGE AVAILABLE]

104. 5,148,251, Sep. 15, 1992, Photoconductive avalanche GaAs switch; Anderson H. Kim, et al., 257/458; 359/243 [IMAGE AVAILABLE]

105. 5,142,542, Aug. 25, 1992, Signal-resonant intracavity optical frequency mixing; George J. Dixon, 372/22; 359/326; 372/21, 69, 92 [IMAGE AVAILABLE]

106. 5,136,669, Aug. 4, 1992, Variable ratio fiber optic coupler optical signal processing element; David W. Gerdt, 385/39, 27, 42, 48 [IMAGE AVAILABLE]

107. RE 33,947, Jun. 2, 1992, Laser scribing method; Hisato Shinohara, 216/65, 75; 219/121.69, 121.85 [IMAGE AVAILABLE]

108. 5,114,876, May 19, 1992, Selective epitaxy using the gild process; Kurt H. Weiner, 117/53, 58; 148/DIG.105, DIG.106; 438/498, 535 [IMAGE AVAILABLE]

109. 5,076,274, Dec. 31, 1991, Non-contact tonometer; Kazuhiro Matsumoto, 600/401, 405 [IMAGE AVAILABLE]

110. 5,068,867, Nov. 26, 1991, Coupled quantum well strained superlattice structure and optically bistable semiconductor laser incorporating the same; Thomas C. Hasenberg, et al., 372/45; 257/17, 18, 21 [IMAGE AVAILABLE]

111. 5,063,566, Nov. 5, 1991, Internally-doubled, composite-cavity microlaser; George J. Dixon, 372/22; 359/328; 372/41, 97, 106, 108 [IMAGE AVAILABLE]

112. 5,062,117, Oct. 29, 1991, Tailored laser system; Douglas W. Anthon, et al., 372/75, 109 [IMAGE AVAILABLE]

113. 5,056,096, Oct. 8, 1991, Hybrid doped fiber-semiconductor amplifier ring laser source; Robert A. Baker, et al., 372/6; 359/341; 372/18, 25, 44, 68, 93; 385/27, 32, 49 [IMAGE AVAILABLE]

114. 5,050,183, Sep. 17, 1991, Figure eight shaped coherent optical pulse source; Irl N. Duling, III, 372/94, 6, 25, 106, 703; 385/27, 32, 141 [IMAGE AVAILABLE]

115. 5,042,058, Aug. [redacted], 1991, Ultrashort time-resolv[redacted]x-ray source; Peter M. Rentzepis, 378/122, 136 [IMAGE AVAILABLE]

116. 5,035,481, Jul. 30, 1991, Long distance soliton lightwave communication system; Linn F. Mollenauer, 359/124, 188; 385/24, 123 [IMAGE AVAILABLE]

117. 5,031,182, Jul. 9, 1991, Single-frequency laser of improved amplitude stability; Douglas W. Anthon, et al., 372/31, 22, 34, 69, 70, 71, 94 [IMAGE AVAILABLE]

118. 5,008,729, Apr. 16, 1991, Laser programming of semiconductor devices using diode make-link structure; Kendall S. Wills, et al., 326/41; 257/290; 326/38 [IMAGE AVAILABLE]

119. 5,005,462, Apr. 9, 1991, Laser controlled semiconductor armature for electromagnetic launchers; Louis J. Jasper, Jr., et al., 89/8; 124/3 [IMAGE AVAILABLE]

120. 5,000,540, Mar. 19, 1991, Sensing system using optical fibers; Kazunori Nakamura, 385/12; 250/227.14, 227.19 [IMAGE AVAILABLE]

121. 4,973,122, Nov. 27, 1990, Optical nonlinear cross-coupled interferometer and method utilizing same; David Cotter, et al., 385/50; 250/227.11, 227.19; 307/407, 409; 356/350; 385/1, 122 [IMAGE AVAILABLE]

122. 4,961,197, Oct. 2, 1990, Semiconductor laser device; Toshiaki Tanaka, et al., 372/45; 257/21, 22; 372/46 [IMAGE AVAILABLE]

123. 4,959,540, Sep. 25, 1990, Optical clock system with optical time delay means; Bunsen Fan, et al., 250/227.12; 385/39 [IMAGE AVAILABLE]

124. 4,956,843, Sep. 11, 1990, Simultaneous generation of laser radiation at two different frequencies; Pedram Akhavan-Leilabady, et al., 372/23, 68, 71, 75 [IMAGE AVAILABLE]

125. 4,933,947, Jun. 12, 1990, Frequency conversion of optical radiation; Douglas W. Anthon, et al., 372/34, 21, 94 [IMAGE AVAILABLE]

126. 4,932,747, Jun. 12, 1990, Fiber bundle homogenizer and method utilizing same; Stephen D. Russell, et al., 385/115; 65/410; 219/121.6, 121.61, 121.79; 362/32, 259; 372/57; 385/121 [IMAGE AVAILABLE]

127. 4,912,066, Mar. 27, 1990, Make-link programming of semiconductor devices using laser-enhanced thermal breakdown of insulator; Kendall S. Wills, 438/600; 148/DIG.55; 438/467, 662, 799 [IMAGE AVAILABLE]

128. 4,901,330, Feb. 13, 1990, Optically pumped laser; Thomas Wolfram, et al., 372/75, 46, 50, 71 [IMAGE AVAILABLE]

129. 4,899,204, Feb. 6, 1990, High voltage switch structure with light responsive diode stack; Har'el Rosen, et al., 250/551; 257/82, 458; 372/35 [IMAGE AVAILABLE]

130. 4,897,849, Jan. 30, 1990, Compact slab laser oscillator-amplifier system; John L. Hughes, 372/66, 93 [IMAGE AVAILABLE]

131. 4,891,815, Jan. 2, 1990, Bulk avalanche semiconductor laser; Larry O. Ragle, et al., 372/44, 46, 49 [IMAGE AVAILABLE]

132. 4,888,556, Dec. 19, 1989, Linear induction accelerator and pulse forming networks therefor; Malcolm T. Buttram, et al., 315/505 [IMAGE AVAILABLE]

133. 4,884,277, Nov. [redacted], 1989, Frequency conversion of optical radiation; Douglas A. [redacted]thon, et al., 372/22, 21, 71, [redacted] [IMAGE AVAILABLE]

134. 4,879,723, Nov. 7, 1989, Intracavity generation of coherent optical radiation of optical mixing; George J. Dixon, et al., 372/21; 359/326; 372/75 [IMAGE AVAILABLE]

135. 4,879,722, Nov. 7, 1989, Generation of coherent optical radiation by optical mixing; George J. Dixon, et al., 372/21; 359/326; 372/22, 75 [IMAGE AVAILABLE]

136. 4,865,923, Sep. 12, 1989, Selective intermixing of layered structures composed of thin solid films; John D. Ralston, et al., 428/620; 148/33.4, DIG.84; 427/552, 555; 438/47, 796 [IMAGE AVAILABLE]

137. 4,865,686, Sep. 12, 1989, Laser scribing method; Hisato Sinohara, 216/101, 65; 219/121.69, 121.85 [IMAGE AVAILABLE]

138. 4,861,964, Aug. 29, 1989, Laser scriving system and method; Hisato Sinohara, 219/121.68, 121.73 [IMAGE AVAILABLE]

139. 4,825,081, Apr. 25, 1989, Light-activated series-connected pin diode switch; Douglas A. Wille, et al., 250/551; 257/80, 432, 443, 458, 607, 623; 327/514 [IMAGE AVAILABLE]

140. 4,824,489, Apr. 25, 1989, Ultra-thin solar cell and method; George W. Cogan, et al., 136/256, 259, 261; 438/64, 89, 96 [IMAGE AVAILABLE]

141. 4,818,100, Apr. 4, 1989, Laser doppler and time of flight range measurement; Michael T. Breen, 356/5.06, 5.09, 28.5, 141.4, 141.5 [IMAGE AVAILABLE]

142. 4,813,049, Mar. 14, 1989, Semimagnetic semiconductor laser; Piotr Becla, 372/44, 4, 37 [IMAGE AVAILABLE]

143. 4,809,193, Feb. 28, 1989, Microprocessor assemblies forming adaptive neural networks; Alexander N. Jourjine, 395/25; 364/228.3, 229, 229.2, 229.4, 229.5, 232.5, 232.8, 232.91, 240, 240.1, 240.6, 253, 253.1, 263, 274, 274.1, 275.1, 275.9, 276.5, 276.6, 276.8, 925.5, 926, 928, 931, 931.2, 931.4, 931.41, 931.45, 933.8, 934, 934.71, 940, 940.1, 940.2, 940.71, 947, 948.3, 948.4, 948.6, 949.3, 949.4, 953, 954, 956, 956.1, DIG.1, DIG.2; 382/158; 385/14 [IMAGE AVAILABLE]

144. 4,803,696, Feb. 7, 1989, Laser with grating feedback unstable resonator; David M. Pepper, et al., 372/95, 92, 96, 98, 99, 102 [IMAGE AVAILABLE]

145. 4,786,865, Nov. 22, 1988, Method and apparatus for testing integrated circuit susceptibility to cosmic rays; Itsu Arimura, et al., 324/765; 250/310, 311 [IMAGE AVAILABLE]

146. 4,774,195, Sep. 27, 1988, Process for the manufacture of semiconductor layers on semiconductor bodies or for the diffusion of impurities from compounds into semiconductor bodies utilizing an additional generation of activated hydrogen; Heinz Beneking, 438/475; 117/103, 906; 148/DIG.71; 204/157.3, 157.41; 427/576, 584, 585; 438/535, 550 [IMAGE AVAILABLE]

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150. 4,737,960, Apr. 12, 1988, Rare earth doped semiconductor laser; Won-Tien Tsang, 372/45, 46, 704 [IMAGE AVAILABLE]

151. 4,737,958, Apr. 12, 1988, High repetition rate laser source having high power; Theodore Sizer, II, 372/18, 25, 94 [IMAGE AVAILABLE]

152. 4,731,795, Mar. 15, 1988, Solid state laser; John H. Clark, et al., 372/107, 21, 22, 66, 71, 101, 108, 109 [IMAGE AVAILABLE]

153. 4,730,335, Mar. 8, 1988, Solid state laser and method of making; John H. Clark, et al., 372/98, 21, 71, 75, 101, 107 [IMAGE AVAILABLE]

154. 4,724,219, Feb. 9, 1988, Radiation melting of semiconductor surface areas through a remote mask; Michael R. Ridinger, 438/535; 117/103, 904; 427/555, 557; 438/799 [IMAGE AVAILABLE]

155. 4,670,063, Jun. 2, 1987, Semiconductor processing technique with differentially fluxed radiation at incremental thicknesses; Steven R. Schachameyer, et al., 117/103, 904; 148/DIG.93; 427/582; 438/487 [IMAGE AVAILABLE]

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157. 4,665,295, May 12, 1987, Laser make-link programming of semiconductor devices; James M. McDavid, 219/121.85; 427/555; 438/600 [IMAGE AVAILABLE]

158. 4,664,940, May 12, 1987, Process for the formation of a flux of atoms and its use in an atomic beam epitaxy process; Marcel Bensoussan, et al., 204/192.1; 117/108, 904; 118/641; 219/121.6; 427/596 [IMAGE AVAILABLE]

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165. 4,477,905, Oct. 16, 1984, Short pulse laser; Harold E. Sweeney, 372/25; 359/248; 372/9, 30 [IMAGE AVAILABLE]

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167. 4,471,369, Sep. 11, 1984, Robotic pressure imagers; Thomas R.

Anthony, et al., 257/437; 73/862.046, 862.68; 257/618 [IMAGE AVAILABLE]

168. 4,446,557, May 1, 1984, Mode-locked semiconductor laser with tunable external cavity; Luis Figueroa, 372/45, 18, 19, 20, 43, 48, 56, 73 [IMAGE AVAILABLE]

169. 4,441,789, Apr. 10, 1984, Resonance absorber; Hubert Pohlack, 359/588 [IMAGE AVAILABLE]

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173. 4,400,256, Aug. 23, 1983, Method of making layered semiconductor laser; Leon H. Riley, 438/39; 204/192.15, 192.17, 192.25; 257/626; 372/43, 44; 438/469, 965 [IMAGE AVAILABLE]

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175. 4,385,198, May 24, 1983, Gallium arsenide-germanium heteroface junction device; W. Patrick Rahilly, 136/249, 261, 262; 148/33.4; 257/189, 200; 438/74, 94, 918, 933 [IMAGE AVAILABLE]

176. 4,380,074, Apr. 12, 1983, Integrated circuit laser and electro-optical amplifier; Peter J. Walsh, 372/43; 359/344 [IMAGE AVAILABLE]

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213. 3,578,864, May 18, 1971, SEMICONDUCTOR STRESS TRANSDUCER; Bernd Ross, 356/32; 73/587, 777, 800; 356/35.5, 349; 359/577, 583, 584; 372/44 [IMAGE AVAILABLE]

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     (FILE 'USPAT' ENTERED AT 09:32:15 ON 30 MAR 1998)
L1         24156 S SEMICONDUCTOR(P)DOP?
L2         21156 S PULS?(P)LASER
L3          4941 S PULS?(P)ION
L4           213 S L1(P)L2
L5            97 S L1(P)L3
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fabrication by self-aligned virtual barrier and virtual gate formation; James Halvis, 438/144, 257/247 [IMAGE AVAILABLE]

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56. 4,812,756, Mar. 14, 1989, Contactless technique for semicondutor wafer testing; Huntington W. Curtis, et al., 324/750; 250/492.2 [IMAGE AVAILABLE]

57. 4,786,865, Nov. 22, 1988, Method and apparatus for testing integrated circuit susceptibility to cosmic rays; Itsu Arimura, et al., 324/765; 250/310, 311 [IMAGE AVAILABLE]

58. 4,772,925, Sep. 20, 1988, High speed switching field effect transistor; Tadashi Fukuzawa, et al., 257/194 [IMAGE AVAILABLE]

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